

## ABSTRACT

5 The invention includes an expression vector engineered to produce double-stranded  
RNA (dsRNA) within a pest to be controlled. The dsRNA inhibits expression of at  
least one gene within the pest, wherein inhibition of the gene exerts a deleterious  
effect upon the pest. For example, inhibition of the gene can lead to cessation of  
feeding, growth, or development and can cause death of the pest. In a preferred  
10 embodiment of the invention the expression vector is a recombinant baculovirus that  
transcribes sense and antisense RNA under the control of the baculovirus IE-1  
promoter and hr5 enhancer. Preferred genes to be inhibited include essential genes,  
genes involved in neurotransmission, and genes that are targets for conventional  
pesticides. The invention discloses baculovirus transfer plasmids useful for producing  
15 the recombinant baculovirus. The invention further discloses methods and formulations  
involving the expression vector.

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